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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/674,409

10/01/2003

Thomas M. Fudali

66396-072

5122

7590 07/09/2008
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Washington, DC 20005-3096

EXAMINER

BODDIE, WILLIAM

ART UNIT	PAPER NUMBER
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2629

MAIL DATE	DELIVERY MODE
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07/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/674,409	Applicant(s) FUDALI ET AL.	
	Examiner WILLIAM L. BODDIE	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 10-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In an amendment dated, April 9th, 2008, the Applicants amended claims 1-9. Currently claims 1-9 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-9 have been considered but are not persuasive.
3. On page 7 of the Remarks, the Applicants traverse the 101 rejection of claims 1-9. Specifically the Applicants argue that the new amendments to claims 1-9 overcome the 101 rejection. The Examiner must respectfully disagree.
4. As previously stated the Applicant's specification quite clearly defines "computer readable medium" as including "acoustic or light waves." (para. 29). The newly amended claims claiming "a machine-readable medium storing code" are still seen as directed to non-statutory subject matter. This interpretation is substantiated by the previously cited paragraphs of the specification. As such the 35 USC 101 rejection is still seen as appropriate and is maintained.
5. On pages 8-9 of the Remarks, the Applicants argue that none of the cited art anticipates the newly added limitations requiring that the touch sensitive active region be within the display element. The Applicants point out that the Kawasaki reference has a touch panel and a display on separate surfaces. The Applicant's argue that due to these separate surfaces Kawasaki's touch sensitive active region can not be within the display element. The Applicant's additionally argue that the cited art do not disclose a

display element and a touch sensitive active region on the same surface of a hand held device. The Examiner must respectfully disagree.

6. First addressing the Applicant's argument that Kawasaki does not disclose display element and a touch sensitive active region on the same surface of a hand held device. Regardless of whether Kawasaki discloses this limitation or not; this is not what is currently claimed. All that is required by the current claims is a display element having a touch sensitive active region therein. There is never any mention within the claims of which surface the touch panel and the display are located on.

7. Furthermore the Applicant's remarks seem to characterize the "touch sensitive active region" as the actual physical touch sensitive circuitry. This is a narrow interpretation of the phrase "touch sensitive active region." The broadest reasonable interpretation would seem to also include the view that the individual pixels which outline the graphical representation define the touch sensitive active region. There is no functional requirement of the region other than the user be able to select the display element "through the touch sensitive active region." Applying this interpretation to Kawasaki the + and - signs in figure 2 would represent the graphical representation. The pixels contained by the boxes surrounding the + and - signs represent the touch sensitive active region. Touching outside the regions will not impart any functionality. It is only when the user selects one of the two boxes through the active region that any functionality is performed. Therefore it should be clear how Kawasaki discloses the newly added limitations.

In short, there is no required location of the touch panel or touch circuitry as the claims are currently constructed. All that is required is that a touch sensitive active region be included in the display element and the element be selected through the region. Kawasaki discloses such a region and requires a touch within said region to invoke functionality.

8. As shown above Kawasaki is seen as disclosing the newly added limitations. Therefore the rejections are updated to reflect the amendments, but are otherwise maintained.

Specification

9. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the newly added language “machine-readable medium” is not discussed within the specification.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

12. Specifically, the newly added limitation requiring user selection of the display element *through the touch sensitive active region* is seen as new matter. The Applicants point to paragraph 40 of the specification as support for the amendment. The Examiner must respectfully disagree.

The Examiner was unable to locate anywhere within paragraph 40 or anywhere else in the specification which described or detailed the process of user selection of a display element as occurring “though the touch sensitive active region.”

Claim Rejections - 35 USC § 101

13. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As pertaining to claims 1-9, the Applicants have clearly communicated that the user interface claimed can take the form of “acoustic or light waves” and is simply a program. (paras. 28-30, 37).

Applicants are directed to page 53 of the Interim Statutory 101 Guidelines, which states; “computer programs claimed as computer listings per se i.e., the descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed.”

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1-4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. (US 7,123,243) in view of Szukala et al. (US 6,801,849).

With respect to claim 1, Kawasaki discloses, a machine-readable medium storing code for invoking a function of an instrument (fig. 5), the code, once executed, causing the instrument to display:

a first navigational menu (12a in fig. 5) including at least one display element (51 in fig. 5), the at least one display element having a touch sensitive active region therein (box surrounding the graphic in 51 in fig. 5) and a graphical representation of functionality invoked via user selection of the display element through the touch sensitive active region (graphic and box in 51 in fig. 5; also note the above discussion).

Kawasaki does not expressly disclose, that the interface is for a diagnostic instrument or a second navigational menu.

Szukala discloses, a touch user interface (fig. 7a-b) for invoking a function of a diagnostic instrument (engine diagnostic), the user interface comprising:

a first navigational menu (fig. 7a-b) including at least one display element (each menu selection, static info...); and

a second navigational menu (fig. 11, for example) configured to be displayed responsive to contact on the touch sensitive active region of the at least one display element (Static Tests icon in fig. 7b), the second navigational menu including a

selection group related to a test suite of the diagnostic instrument (fuel injector, ignition firing etc. in fig. 11).

Kawasaki and Szukala are analogous art because they are both from the same field of endeavor namely design of PDA touch user interfaces.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use the instrument of Kawasaki as a diagnostic tool and include a second navigational menu as taught by Szukala.

The motivation for doing so would have been the need for a portable engine diagnostic device (Szukala; col. 2, lines 15-17) as well as the well-known benefit of providing a main menu and submenus to help a user more quickly reach the function they desire.

With respect to claim 2, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Kawasaki, when combined with Szukala, further discloses, wherein the selection group includes a plurality of display elements (Szukala; fuel injector, ignition firing etc in fig. 11), each of the plurality of display elements having a touch sensitive active region to enable user selection of the plurality of display elements (Szukala; col. 13, lines 1-9).

With respect to claim 3, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Kawasaki, when combined with Szukala, further discloses, wherein the selection group includes fewer than ten display elements to permit discrete touch sensitive selection of each of the fewer than ten display elements (Szukala; only 5 in fig. 11).

With respect to claim 4, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Kawasaki further discloses, wherein the first navigational menu includes at least six display elements (nine in fig. 5), each of the at least six display elements having a discrete touch sensitive active region sized to permit finger tip selection (note the size of the icons in fig. 2 and their relation to the user's finger tips).

With respect to claims 7, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Kawasaki further discloses, wherein the touch sensitive active region comprises an area having a polygonal shape (rectangle) of at least 1/4 square inch (see finger sized relation to the icon size in fig. 2, icons in fig. 2 are even smaller than icons shown in fig. 11).

17. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. (US 7,123,243) in view of Szukala et al. (US 6,801,849) and further in view of Banks et al. (US 6,603,494).

With respect to claim 5, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Neither Kawasaki nor Szukala expressly disclose including a textual description of the functionality with the graphic.

Banks discloses, a diagnostic instrument, comprising a touch-based user interface, wherein at least one display element comprises

a textual description of functionality invoked by user selection of the display element (schedule, close, analyze, for example in fig. 5).

Banks, Kawasaki and Szukala are analogous art because they are from the same field of endeavor namely design of touch user interfaces.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include textual descriptions alongside the graphics of Kawasaki and Szukala.

The motivation for doing so would have been the well-known benefit of removing any question in the user's mind what the graphic represents.

18. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. (US 7,123,243) in view of Szukala et al. (US 6,801,849) and further in view of Debrus et al. (US 5,598,527).

With respect to claim 6, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Kawasaki further discloses, wherein the touch sensitive active region comprises a circular area with a diameter of at least 3/8 inch (3/8 inch diameter is almost half the size of a dime; Kawasaki discloses a space at the very least that large as seen in fig. 2).

Kawasaki and Szukala do not expressly disclose wherein the touch sensitive active region comprises an approximately circular shape.

Debrus discloses, a touch sensitive device wherein a touch sensitive active region (13-20 in fig. 1) comprises an approximately circular shape (see fig. 1) with a diameter of at least 3/8 inch (col. 3, lines 27-30; 47 is approx. 6 inches long which equates to at least a diameter of at least 6/8 of an inch).

Debrus, Kawasaki and Szukala are analogous art because they are from the same field of endeavor namely, touch screen device design and implementation.

At the time of the invention it would have been obvious to one of ordinary skill in the art to size the display elements of Kawasaki and Szukala to permit finger tip selection as taught by Debrus.

The motivation for doing so would have been the well known benefit of allowing the user to more easily locate the icons.

The currently claimed differences in shape over Kawasaki and Szukala in view of Debrus are not seen as patentably distinct from the prior art. In short whether the touch regions are polygons or circular is immaterial and insignificant. The device will not perform differently should the user interface use polygons or circular shapes for the touch regions. The Applicant is directed to section 2144.04.IV.A-B of the MPEP.

19. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. (US 7,123,243) in view of Szukala et al. (US 6,801,849) and further in view of Ross et al. (US 5,859,628).

With respect to claim 8, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Neither Kawasaki nor Szukala expressly disclose, wherein the touch sensitive active region comprises at least 1/10 of the screen area.

Ross discloses, a user interface (fig. 6d), and that the touch sensitive active region comprises at least 1/10 of the screen area (also clear from fig. 6d).

At the time of the invention it would have been obvious to one of ordinary skill in the art to size the display elements of Kawasaki and Szukala to span the entire display area as taught by Ross.

The motivation for doing so would have been to allow the user to more easily recognize the icons and text of the screen (Ross; col. 7, lines 11-12; for example).

20. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. (US 7,123,243) in view of Szukala et al. (US 6,801,849) and further in view of Cross et al. (US 7,154,481).

With respect to claim 9, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Neither Kawasaki nor Szukala expressly disclose, wherein the first and second navigational menus are displayed on a touch screen device sized and positioned so as to be responsive to a gloved finger.

Cross discloses, a touch screen wherein the device is sized and positioned so as to be responsive to a gloved finger (col. 4, lines 47-49).

Cross, Kawasaki and Szukala are analogous art because they are from the same field of endeavor namely, touch screen device design and implementation.

At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the touch screen of Kawasaki and Szukala in the manner of Cross to ensure that the device is responsive to a gloved finger.

The motivation for doing so would have been as a convenience and ease of use to the user to not have to remove any gloves in order to operate the machine. This is

especially applicable to Kawasaki and Szukala, which is likely to be used in automobile repair centers where gloves are commonly worn.

Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM L. BODDIE whose telephone number is (571)272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/

Supervisory Patent Examiner, Art Unit 2629

/William L Boddie/

Examiner, Art Unit 2629

6/30/08